

DETAILED ACTION

1. This action is in response to application filed on 05 December 2006. **Claims 1-36** are now pending in the present application. This office action is made **Non-Final**.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
3. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e). Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Claim Objections

4. **Claims 11 and 19** are objected to because of the following informalities:
 - a. Claim 11 recites the limitation “...**said** concurrent state...” in line(s) 8 of the claim. The Examiner interprets as --**a** concurrent state-- and suggests replacing **said** limitation to help clarify the **antecedent** of the claim language.
 - b. Claim 19 recites the limitation “...value; ...” in line(s) 5 of the claim. The Examiner requests that the punctuation **mark** -- . -- be added and suggests replacing the limitation with -- value. -- to help clarify the claim language.
- Appropriate correction is required.

5. This list of examples is not intended to be exhaustive. The Examiner respectfully requests the applicant to review all claims and clarify the issues as listed above as well as any other issue(s) that are not listed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4/1, 5, 9-10, 12/10, 13-14, 16/13, 17, 21, 23/21, 24-25, 27/25, 29, 31-32, 34/31, 34/32, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by **Adachi et al.** (hereinafter Adachi) (*A Handoff Examination of a Hybrid System Using Cellular and Ah-Hoc Modes*).

Regarding **claims 1 and 25**, Adachi discloses a method performed by a user equipment in wireless communication systems, for switching from P2P (Peer_to_Peer) communication mode to UP- UTRAN-DOWN communication mode (called as conventional mode) (see pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41), comprising steps of:

- (a) detecting the direct link used by the user equipment in P2P communication with the other user equipment (see pg. 2497, RH col., lines 4-10; Figs. 3, 5-6, & 8);
- (b) sending a request for switching to conventional communication mode to a wireless communication network system, if the detecting result indicates that the communication

quality of the direct link can't satisfy the requirement for P2P communication (see pg. 2497, RH col., lines 17-21); and

(c) establishing conventional communication connection to communicate with said the other user equipment in conventional communication mode, after receiving acknowledge (ACK) message of the request for switching sent by the network system (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claim 4/1 and 27/25**, Adachi discloses method according to claim 1, 2 or 3, wherein step (b) includes:

(b1) testing the communication quality of said direct link at every other certain interval and acquiring the corresponding testing result, if the detecting result indicates that the communication quality of said direct link is under a predefined value (see pg. 2497, RH col., lines 4-10,17-21; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);

(b2) computing the communication quality of said direct link in the interval according to the acquired testing result in the predetermined interval (see pg. 2497, RH col., lines 4-10,17-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and

(b3) sending said request for switching to conventional communication mode to the network system if the computed result indicates that the communication quality of said direct link can't satisfy the requirement for P2P communication (see pg. 2497, RH col., lines 17-21; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claim 5**, Adachi discloses the method according to claim 4, further comprising: (b4) continuing with P2P communication mode if the computed result indicates that the communication quality of said direct link can satisfy the requirement for P2P

communication (see pg. 2497, RH col., lines 1-3; pg. 2495, RH col., lines 6-11; Figs. 2-4 & 8).

Regarding **claim 9/1**, Adachi discloses the method according to any one of claims 1 to 3, wherein the traffic channel of direct communication link can be taken as one of uplink traffic channel and downlink traffic channel in conventional communication mode (see pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41).

Regarding **claims 10 and 29**, Adachi discloses a method performed by the wireless communication network system in wireless communication systems, for switching user equipments from P2P (Peer to Peer) communication mode to UP-UTRAN-DOWN communication mode (called as conventional communication mode) (see pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41), comprising:

- (A) receiving requests from UE in P2P communication mode for switching to conventional communication mode (see pg. 2497, RH col., lines 17-21);
- (B) responding to the requests for switching to conventional communication mode and allocating traffic channel in conventional communication mode to the two user equipments in P2P communication mode (see pg. 2497, RH col., lines 17-21); and
- (C) sending ACK messages of the requests for switching to the two user equipments, so that the two user equipments can establish conventional communication connection (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claim 12/10**, Adachi discloses the method according to claim 10 or 11, wherein the conventional communication mode traffic channel allocated by said network

system to the two user equipments, at least contains one of the downlink traffic channel and the uplink traffic channel (see pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41).

Regarding **claims 13 and 31**, Adachi discloses a method performed by a user equipment for switching from UP_UTRAN_DOWN (called as conventional communication mode) to P2P communication mode (see pg. 2497, RH col., lines 13-17; pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41), comprising:

- (a) receiving control information from the wireless communication network system (see pg. 2497, RH col., lines 4-10; Figs. 2-4 & 8);
- (b) overhearing the information transferred on the uplink between the network system and said the other user equipment communicating with the user equipment in conventional communication, according to the control information (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);
- (c) detecting whether the user equipment can overhear the information transferred on the uplink, to determine whether the communication quality of the uplink can satisfy the requirement for P2P communication between the other user equipment and the user equipment (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);
- (d) establishing P2P connection with the other user equipment by using the uplink, so that the user equipment can communicate with the other user equipment in P2P communication mode, if the detecting result indicates that the uplink can satisfy the quality requirement for P2P communication (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claims 14 and 32**, Adachi discloses the method according to claim 13, wherein step (d) includes:

(d1) sending a notification message to the network system if the detecting result indicates that the uplink can satisfy the quality requirement for P2P communication (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and
(d2) establishing P2P connection with said the other user equipment, according to the instruction message from the network system for establishing P2P connection (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claims 16/13, 34/31, and 34/32**, Adachi discloses the method according to claim 13, 14 or 15, wherein step (c) includes:

(c1) testing the quality of the overheard uplink at every other certain interval and acquiring the corresponding testing result (see pg. 2497, RH col., lines 4-10,17-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and
(c2) computing the communication quality of the overheard uplink in the interval, according to the testing result acquired in the predetermined interval (see pg. 2497, RH col., lines 4-10,17-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claim 17**, Adachi discloses the method according to claim 13, further comprising:

(e) continuing with conventional communication mode if the testing result indicates that the uplink can't satisfy the quality requirement for P2P communication (see pg. 2497, RH col., lines 1-3; pg. 2495, RH col., lines 6-11; Figs. 2-4 & 8).

Regarding **claims 21 and 36**, Adachi discloses a method performed by the wireless communication network system in wireless communication systems for the user equipment to switch from UP_UTRAN_DOWN (conventional communication mode) to P2P communication mode (see pg. 2495, LH col., lines 6-20; pg. 2494, RH col., lines 22-41), comprising:

- (a) determining whether the two user equipments satisfy the condition of establishing P2P communication (see pg. 2497, RH col., lines 13-17);
- (b) sending control information to the two user equipments respectively to instruct them to overhear information transferred on the uplink between their peers and the network system, if the two user equipments satisfy the condition of establishing P2P communication (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);
- (c) receiving notification messages from the two user equipments, which indicate that each of the two user equipments can overhear information transferred on the uplink between its peer and the network system (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and
- (d) sending instruction messages to the two user equipments respectively to instruct them to establish mutual P2P communication (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8).

Regarding **claim 23/21**, Adachi discloses the method according to claim 21 or 22, wherein step (a) includes:

(a1) determining whether the distance between the two user equipments falls within the scope of P2P communication, according to the position information of said two user equipments (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8);

(a2) determining whether the two user equipments both have P2P communication capability (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8);

(a3) determining whether the two user equipments camp in the same cell (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8); and

(a4) determining that P2P communication can be established between the two user equipments when the two user equipments satisfy the conditions of step (a1), (a2) and (a3) concurrently (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8).

Regarding **claim 24**, Adachi discloses the method according to claim 23, wherein the position information of said user equipments can be acquired according to one of the information acquired by searching and positioning the user equipments and the information sent by the user equipments to the network system (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 2-4 & 8).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 4/2, 4/3, 6-8, 9/2, 9/3, 11, 12/11, 15, 16/14, 16/15, 18-20, 22, 23/22, 26, 27/26, 28, 30, 33, 34/33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Adachi et al.** (hereinafter Adachi) (*A Handoff Examination of a Hybrid System Using Cellular and Ah-Hoc Modes*) in view of **Capece (US 6,415,146 B1)**.

Regarding **claims 2 and 26**, Adachi discloses the method according to claim 1, wherein step (c) includes:

(c1) entering state of P2P communication and conventional communication, after receiving the ACK message of the request for switching sent by the network system and acquiring the allocated conventional communication mode traffic channel (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);

(c2) testing the acquired traffic channel in conventional communication mode after entering state (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);

(c3) sending a request for releasing P2P communication radio resource to the network system if the testing result indicates that the communication quality of the traffic channel in conventional communication mode can satisfy the requirement for conventional communication (see pg. 2494, LH col., lines 4-10, 17-21; Figs. 3, 6, & 8); and

(c4) releasing the radio resource occupied by the direct link so that the user equipment can switch from the state to single conventional communication mode after receiving the ACK message of the request for releasing P2P communication radio resource sent by the network system (see pg. 2494, LH col., lines 4-10,17-21; Figs. 2-3, 6, & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

In the same field of endeavor, Capece discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claim 3**, the combination of Adachi and Capece discloses every limitation claimed, as applied above (see claim 2), in addition Adachi further discloses the method according to claim 2, wherein the user equipment can send said request for switching to conventional communication mode and said request for releasing P2P communication radio resource to the network system, via any channel of the uplink control channel and the customized uplink channel (see pg. 2494, LH col., lines 4-10,17-21; Figs. 2-3, 6, & 8).

Regarding **claims 4/2, 4/3, and 27/26**, the claims as applied to claims 2 and 3, respectively, are rejected for the same reasons as set forth above in the rejection of **claim 4/1**.

Regarding **claims 6 and 28**, Adachi discloses the method according to claim 2, wherein step (c2) includes:

(c21) testing the communication quality of the traffic channel in said conventional communication mode at every other certain interval and acquiring the corresponding testing result, after entering state (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and

(c22) computing to get the communication quality of said traffic channel in conventional communication mode in the interval, according to the testing result acquired in the predetermined interval (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

Capece further discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources

by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claim 7**, the combination of Adachi and Capece discloses every limitation claimed, as applied above (see claim 6), in addition Adachi further discloses the method according to claim 6, further comprising:

counting the number of computing the communication quality of said traffic channel in conventional communication mode in said interval (see pg. 2498, LH col., lines 1-9; pg. 2498, LH col., line 18 - RH col., line 5; Figs. 2-4 & 8-11); and

testing and computing the communication quality of said conventional communication mode traffic channel in said interval again after increasing the number, if the number doesn't exceed a predefined value (see pg. 2498, LH col., lines 1-9; pg. 2498, LH col., line 18 - RH col., line 5; Figs. 2-4 & 8-11).

Regarding **claim 8**, the combination of Adachi and Capece discloses every limitation claimed, as applied above (see claim 7), in addition Adachi further discloses the method according to claim 7, further comprising: continuing with P2P communication mode if said number exceeds a predefined value (see pg. 2495, RH col., lines 6-11; pg. 2497, RH col., lines 1-3; pg. 2499, RH col., lines 22-36; Figs. 2-4 & 8-11).

Regarding **claims 9/2 and 9/3**, the claims as applied to claims 2 and 3, respectively, are rejected for the same reasons as set forth above in the rejection of **claim 9/1**.

Regarding **claims 11 and 30**, Adachi discloses the method according to claim 10, wherein further comprising:

(D) receiving requests for releasing P2P communication radio resource from the two user equipments (see pg. 2494, LH col., lines 4-10,17-21; Figs. 3, 6, & 8); and

(E) responding to the requests for releasing P2P communication radio resource and reclaiming the P2P communication radio resource (see pg. 2494, LH col., lines 4-10,17-21; Figs. 3, 6, & 8); and

(F) sending ACK messages of the requests for releasing P2P communication radio resource to the two user equipments, so that the two user equipments can switch from said state to single conventional communication mode, after reclaiming the P2P communication radio resource (see pg. 2494, LH col., lines 4-10,17-21; Figs. 2-3, 6, & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

In the same field of endeavor, Capece discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claim 12/11**, the claim as applied to claim 10 is rejected for the same reasons as set forth above in the rejection of **claim 12/10**.

Regarding **claims 15 and 33**, Adachi discloses the method according to claim 14, wherein step (d2) includes:

(d21) establishing P2P connection with the other user equipment and entering state of P2P communication and conventional communication, according to the instruction message for establishing P2P connection from the network system (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);

(d22) testing the established P2P link after entering state (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8);

(d23) sending a request for releasing conventional communication radio resource to the network system, if the testing result shows that the communication quality of the P2P link can satisfy the requirement for P2P communication (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and

(d24) releasing the radio resource occupied by the conventional link so that the user equipment can switch from the state of P2P communication and conventional communication to single P2P communication mode, after receiving the ACK message of the request for releasing conventional communication radio resource sent by the network system (see pg. 2497, RH col., lines 13-17; pg. 2495, RH col., line 8 - pg. 2495, RH col., line 8; Figs. 2-4 & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

In the same field of endeavor, Capece discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claims 16/14, 16/15, and 34/33**, the claims as applied to claims 14 and 15, respectively, are rejected for the same reasons as set forth above in the rejection of **claim 16/13**.

Regarding **claims 18 and 35**, Adachi discloses the method according to claim 15, wherein step (d22) includes:

(d221) testing the communication quality of said P2P link at every other certain interval and acquiring the corresponding testing result after entering state (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8); and

(d222) computing to get the communication quality of said P2P link in the interval according to the testing result acquired in the predetermined interval (see pg. 2495, LH col., lines 37-41; pg. 2495, RH col., line 6 - pg. 2495, RH col., line 8; Figs. 2-4 & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

Capece further discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claim 19**, the combination of Adachi and Capece discloses every limitation claimed, as applied above (see claim 6), in addition Adachi further discloses the method according to claim 18, further comprising:

counting the number of computing the communication quality of said P2P link in said interval (see pg. 2498, LH col., lines 1-9; pg. 2498, LH col., line 18 - RH col., line 5; Figs. 2-4 & 8-11); and

testing and computing the communication quality of said P2P link in said interval again after increasing the number, if the number doesn't exceed a predefined value (see pg. 2498, LH col., lines 1-9; pg. 2498, LH col., line 18 - RH col., line 5; Figs. 2-4 & 8-11).

Regarding **claim 20**, the combination of Adachi and Capece discloses every limitation claimed, as applied above (see claim 7), in addition Adachi further discloses the method according to claim 19, further comprising: continuing with conventional

communication mode if said number exceeds a predefined value (see pg. 2495, RH col., lines 6-11; pg. 2497, RH col., lines 1-3; pg. 2499, RH col., lines 22-36; Figs. 2-4 & 8-11).

Regarding **claim 22**, Adachi discloses the method according to claim 21, further comprising:

(e) receiving requests for releasing conventional communication radio resource from the two user equipments (see pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8); and

(f) sending ACK messages of the requests for releasing conventional communication radio resource to the two user equipments respectively, so that the two user equipments respectively switch from the concurrent state of P2P communication and conventional communication to single P2P communication mode (see pg. 2497, RH col., lines 13-17; pg. 2494, LH col., lines 4-10,17-21; Figs. 3-4 & 8). Adachi does not specifically disclose having the feature(s) concurrent state. However, the examiner maintains that the feature(s) concurrent state was well known in the art, as taught by Capece.

In the same field of endeavor, Capece discloses the feature(s) concurrent state (see col. 6, lines 22-38; Figs. 1 & 5), where the mobiles (e.g., 100-1 & 100-2) are communicating in mobile-to-mobile and normal operating mode to hand off traffic.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Adachi and Capece to have the feature(s) concurrent state, in order to provide a system and method which enables proximate mobile to directly communicate, thereby reducing the burden imposed on network resources by calls between subscribers in the same geographic area, as taught by Capece (see col. 1, lines 56-60).

Regarding **claim 23/22**, the claim as applied to claim 22 is rejected for the same reasons as set forth above in the rejection of **claim 23/21**.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Jia et al. (US 7,283,832 B2) discloses a method and system for establishing wireless peer-to-peer communications.
 - b. Berger (US 6,744,750 B1) discloses replicating and recombinant networking systems and methods for wireless networks.
 - c. Ma et al. (US 5,995,500) discloses a method and apparatus for direct communication between mobile stations.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE J. DANIEL JR whose telephone number is (571)272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,Jr/

WJD,Jr
22 April 2010

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617